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09/602,018	06/23/2000	Surya Raghu	2973-Z	9210

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EXAMINER

KIM, CHRISTOPHER S

ART UNIT PAPER NUMBER

3752

DATE MAILED: 12/01/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/602,018

Applicant(s)

RAGHU ET AL.

Examiner

Christopher S. Kim

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Amendment filed October 9, 2001 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Drawings***

3. The drawings are objected to because the poor quality prohibits thorough examination of the application. Following are some examples of corrections required. Applicant is required to submit new drawings and to correct the specification.

Reference signs "11" and "20" both designate the fluidic oscillator device.

Reference signs "13" and "SW" both designate the wall.

### ***Claim Objections***

4. Claim 1 is objected to because of the following informalities: in claim 1, line 3, --therapeutic-- should be inserted after "more". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to

Art Unit: 3752

make and/or use the invention. The specification does not disclose how the "passages are angulated" (claim 2).

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said outlet" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "said common outlet" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "a common outlet" in line 5. This appears to be a double inclusion of the "said common outlet" in claim 1, lines 11-12.

Claim 2 recites the limitation "a pair of liquid outlet passages" in line 6. This appears to be a double inclusion of the "pair of outlet passages" in claim 1, line 8.

The term "smoothly" in claims 2 and 5 is a relative term which renders the claims indefinite. The term "smoothly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is uncertain how the recitation "smoothly extended" further limits the passages.

Claim 5 recites the limitation "said common outlet" in line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "said outlet" in line 4. It is uncertain whether it is in reference to one of the pair of outlets or the common outlet recited in claim 5.

***Claim Rejections - 35 USC § 103***

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer (4,662,568) in view of Fichter (3,776,460).

With respect to claim 1,

Bauer discloses a therapeutic water nozzle comprising: a housing 36, 38 having an inlet 14; a fluidic oscillator having an oscillation chamber 10 and a power nozzle (outlet of inlet 14 into chamber 10); a first jet of water (flow arrow out of inlet 14 as shown in figure 1A); a pair of outlet passages (passages above and below the power nozzle formed by walls 18 and 19 as shown in figure 1A); outlet (common outlet) 22; an air passage 42. Bauer does not disclose a therapeutic spa tub.

Fichter discloses, in column 1, lines 5-14, a fluidic oscillator used in whirlpool baths. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the fluidic oscillator of Bauer in a therapeutic spa tub as taught by Fichter for increased atomization.

With respect to claim 2,

Bauer further discloses a reversing wall 16. Bauer also cites his U.S. Patent No. 4,184,636 which discloses sweep angle and frequencies in column 9, line 1 through column 10 line 20 (in particular). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have optimized the frequency and sweep angle in the device of Bauer dependent on application criteria.

With respect to claim 3,

Art Unit: 3752

Bauer further discloses an outer wall 18, 20.

With respect to claim 4,

Bauer further discloses a pair of sidewalls 28, 30.

With respect to claim 5,

Bauer discloses a therapeutic water nozzle comprising: a housing 36, 38 having an inlet 14; a fluidic oscillator having an oscillation chamber 10 and a power nozzle (outlet of inlet 14 into chamber 10); a first jet of water (flow arrow out of inlet 14 as shown in figure 1A); a pair of outlets (passages above and below the power nozzle formed by walls 18 and 19 as shown in figure 1A); a reversing wall 16; a common outlet 22. Bauer does not disclose a therapeutic spa tub.

Fichter discloses, in column 1, lines 5-14, a fluidic oscillator used in whirlpool baths. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the fluidic oscillator of Bauer in a therapeutic spa tub as taught by Fichter for increased atomization.

Bauer also cites his U.S. Patent No. 4,184,636 which discloses frequencies in column 10, lines 3-20 (in particular). It would have been obvious to a person having ordinary skill in the art at the time of the invention to have optimized the frequency in the device of Bauer dependent on application criteria.

***Allowable Subject Matter***

8. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: prior art does not disclose "a feed ring" having a wall defining a water chamber surrounding the reversing chamber and the wall defining an air chamber for supplying air and water to the claimed nozzle. The "feed ring" has been interpreted in light of the specification as defined on page 4, line 5 through page 5, line 2.

***Response to Arguments***

10. Applicant's arguments filed October 9, 2001 have been fully considered but they are not persuasive.

In response to applicant's argument that underwater operations are not disclosed, a whirlpool bath, disclosed by Fichter, inherently has a nozzle under the waterline.

In response to applicant's argument that the references have nothing to do with issuing one or more pulsating jets of water into a spa tub below the waterline, as stated above, a whirlpool bath inherently has a nozzle under the waterline and Bauer disclose issuing pulsating jets (as seen in figure 1A, the spray is sinusoidal).

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel can be reached on (703) 308-1272. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7766 for regular communications and (703) 308-7766 for After Final communications.



Art Unit: 3752

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

CK  
November 29, 2001

  
**STEVEN J. GANEY**  
**PATENT EXAMINER**  
11/29/01